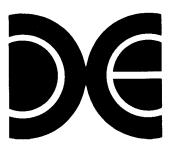
# BATTLE WINGS



# **INSTALLATION INSTRUCTIONS**



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# DIP SWITCH SETTINGS

DIP SWITCH 1						
No.	SETTING					
1	OFF	ON	OFF	ON	RIGHT	
2	OFF	OFF	ON	ON	SELECTOR	
	1 COIN 1 CREDIT	1 COIN 2CREDIT	1 COIN 3 CREDIT	2 COIN 1 CREDIT	COIN CREDIT	
3	OFF	. ON	OFF	ON	LEFT	
4	OFF	OFF	ON	ON	SELECTOR	
	1 COIN 1 CREDIT	1 COIN 2 CREDIT	1 COIN 3 CREDIT	2 COIN 1 CREDIT	COIN CREDIT	
5	OF	FF	0	N	GAME DIAG	
	GA	ME	DIAG		MODE	
6	OF	F	ON		C T U R	
	TAI	3LE	UPRI	GHT	MODE	
7	OF	F	ON			
	GAI	GAME TEST		ST	KEEP OFF	
8	OF	<u> </u>	ON		LIND ON	
	GAI	ME	TEST		KEEP OFF	

			DIPS	SWITCH 2	)	
No.	SETTING					
1	O	FF	ON		NUMBER OF	
		3		5	AIR CRAFTS	
2	OFF	ON	OFF	ON		
3	OFF	OFF	ON	ON	1	
	20,000 EXTRA FIGHTER, OVER 20,000 EXTRA FIGHTER FOR EVERY 40,000	20,000 EXTRA FIGHTER, OVER 20,000 EXTRA FIGHTER FOR EVERY 60,000	40,000 EXTRA FIGHTER, OVER 40,000 EXTRA FIGHTER FOR EVERY 80,000	40,000 EXTRA FIGHTER	BONUS AIR CRAFT	
4	IO	F	ON DIFFICULT		DIFFICULTY	
	EASY	7			ENEMY CRAFTS	
5	OF	FF	ON DIFFICULT		DIFFICULTY MISSILES	
	EASY	ζ				
6					NOT USED	
7	OF	`F	ON UNITED STATES			
	JAP	AN			JAPAN/ UNITED STATES	
8					NOT USED	

## POWER SUPPLY

+5V	± 2%	5 <b>A</b>
+12V	±2%	1 A
-5V	±2%	0.1A

# **OPERATION ENVIRONMENTS**

	Temperature	Humidity
Operation	5 ~ 35° C	20 ~ 80%
Storage	-15 ~ 65° C	10 ~ 90%

## CRT MONITOR

(1) Color Signals R.G.B. Separate

Black

$$0 - +2V$$

Image Signal

(2) Synchronize Signal Composite or Horiz/Vert separated.

0

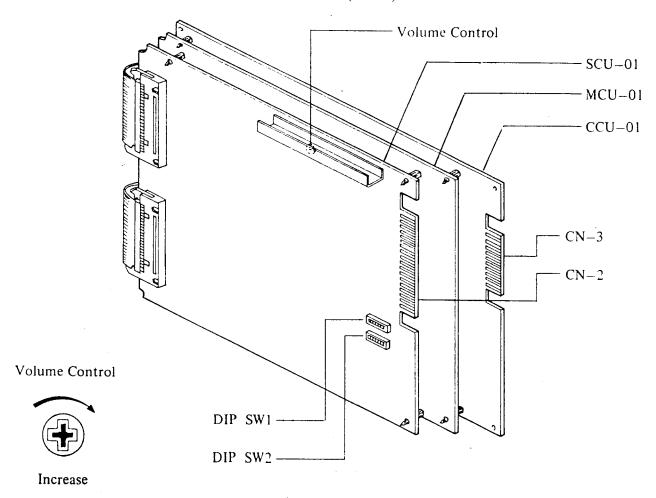
$$0-0.5V$$

1

$$+3V - +5V$$

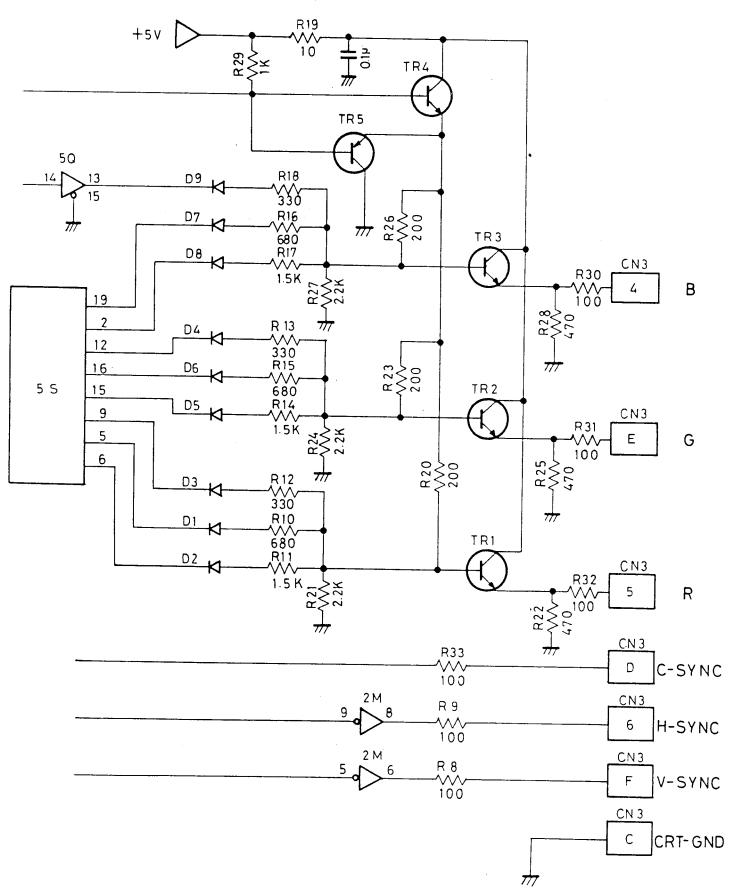
### PCB IDENTIFICATION

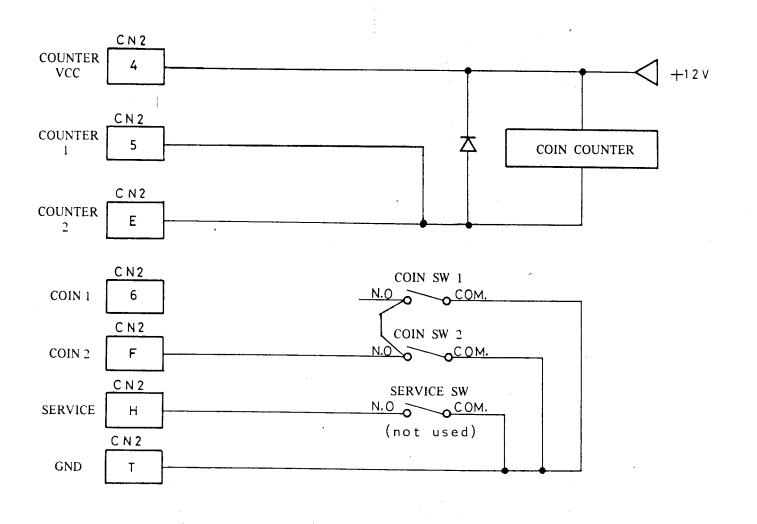
CONNECTOR SCU-01 CR7E-36DA-3.96E (CN-2) CCU-01 CR7E-20DA-3.96E (CN-3)



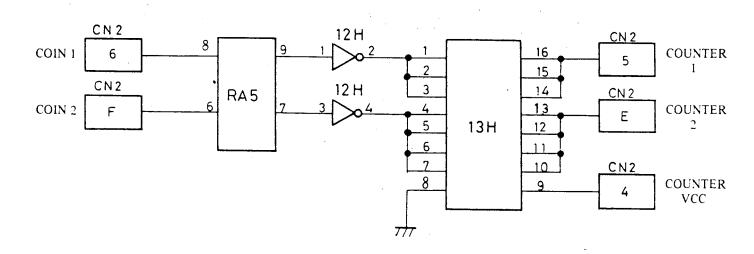
## MONITOR CONNECTION PCB CCU-01

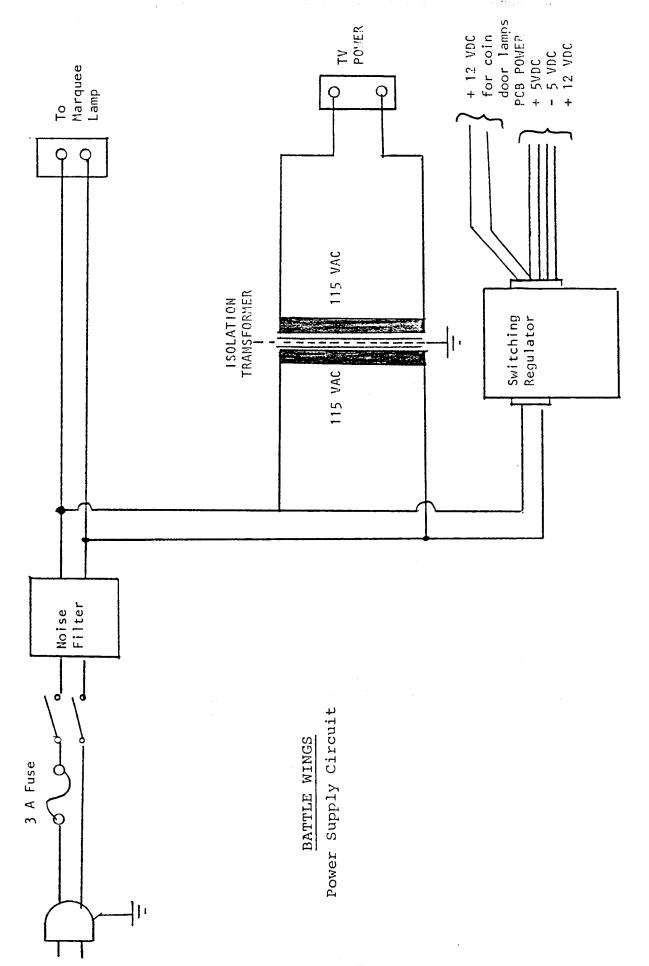
Monitor input composite signals — Horiz/Vert on +5V can be connected. Circuit diagram of each signal shown below.





# COIN COUNTER - DRIVE CIRCUIT PCB SCU-01





#### HARNESS CONNECTION

#### 1) Terminal Numbering CR7E-36DA-3.96E (HIROSE) 3.96mm Pitch



CR7E-20DA-3.96E (HIROSE) 3.96mm Pitch



#### 2) Signal to Terminal

#### CCU-01 Connector CN3-CR7E-20DA-3.96E

Pin	Signal	Pin	Signal	
1	GND	A	GND	
2	GND	В	GND	
3	GND	С	TV. GND	
4	TV. B	D	SYNC.	
_ 5	· TV. R	Е	TV. G	
6	H-SYNC	F	V-SYNC	
7		Н		
- 8	+5V	J	+5V	
9	+5V	K	+5V	
10	+5V	L	+5V	

#### SCU-01 Connector CN2-CR7E-36DA-3.96E

Pin	Signal	Pin	Signal	
1	+12V	A	+12V	
2	+5V	В	+5 V	
3	+5V	С	+5V	
4	COUNTER Vcc	D	-5V	
5	COUNTER 1	E	COUNTER '2	
6	COIN 1	F	COIN 2	
7	TILT SW.	H	SERVICE	
8	1 P	J	2P	
9	1P SHOOT 2	K	2P SHOOT 2	
10	1P SHOOT 1	L	2P SHOOT 1	COCKTAIL
11	IP DOWN	M	2P DOWN	- TABLE
12	IP UP	N	2P UP	MULE
13	1P LEFT	P	2P LEFT	ONLY
14	1P RIGHT	R	2P RIGHT	
15	SPEAKER +	S	SPEAKER -	
16	GND	Т	GND	
17	GND	U	GND	
18	GND	V	GND	

